In the Claims

1. (Currently Amended) A method of stimulating a HIV1-specific CD8⁺ response in a human infected with an HIV retrovirus said method comprising:

administering to the human, a recombinant <u>virus</u> <u>viral vaccine</u>, which enters the cells of the human and intracellularly produces HIV specific peptides for presentation on the cell's MHC class I molecules,

where said peptides are presented in an amount sufficient to stimulate a protective CD8⁺ HIV structural antigen response, and

where said human

- i. has a viral load of less than 10,000 viral copies per ml of plasma and a CD4⁺ cell count of above 500 cells/ml, and
- ii. has been treated with one or more anti-viral agents, which contributed to a lower viral copy and higher CD4⁺ cell count than before treatment

where said HIV specific peptides comprise HIV <u>Gag, Gp120, Nef or Pol gag, gp120, nef or pol</u> peptides.

- 2. (Previously Presented) A method of claim 1 wherein the human has been treated with anti-viral agents, which resulted in the human having a viral load of less than 1,000 viral copies per ml of blood serum and a CD4⁺ cell count of above 500 cells/ml.
- 3. (Original) A method of claim 2 wherein the anti-viral agents comprise a combination of protease inhibitors and inhibitors of reverse transcriptase.
- 4. (Canceled).
- 5. (Currently Amended) A method of claim 1 wherein the recombinant <u>virus</u> viral vaccine is an attenuated recombinant virus.

Title: Immunotherapy I HIV Infected Persons Using Vaccines After Multi-Drug Treatment

Page 3 Dkt: 1662.018US1

- 6. (Previously Presented) A method of claim 5 wherein the attenuated recombinant virus comprises a pox virus.
- 7. (Previously Presented) A method of claim 6 wherein the attenuated recombinant pox virus comprises NYVAC or ALVAC.
- 8. (Previously Presented) A method of claim 6 wherein the recombinant pox virus comprises MVA.
- 9. (Original) A method of claim 1 where the vaccine is administered a second time.
- 10. (Previously Presented) A method of claim 1 wherein the HIV specific peptides are structural viral peptides.
- 11. (Canceled).
- 12. (Original) A method of claim 1 wherein the vaccine further comprises an adjuvant.
- 13. (Original) A method of claim 1 further comprising administering interleukin 2 or CD40 ligand in an amount sufficient to potentiate the CD8⁺ response.
- 14. (Currently Amended) A method of claim 1 where the human has been infected with HIV and has demonstrated repeated and sustained proliferative T-cell responses to <u>Gp120</u> gp120 envelope protein.
- 15. (Currently Amended) A method of claim 14 where the human has demonstrated repeated and sustained proliferative T-cell responses to p24 <u>Gag</u> gag antigen.
- 16. (Currently Amended) A method of claim 1 where the human is infected with HIV and is further tested by a skin test for a hypersensitive response to p24 <u>Gag gag</u> antigen.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 10/048072 Filing Date: January 25, 2002

Title: Immunotherapy I HIV Infected Persons Using Vaccines After Multi-Drug Treatment

17. (Currently Amended) A method of claim 1 where the human is infected with HIV and is further tested by a skin test for a hypersensitive response to <u>Gp120 gp120</u> envelope antigen.

18. (New) A method of reducing viral load in a mammal infected with an immunodeficiency retrovirus said method comprising:

administering to the mammal a recombinant virus, which enters the cells of the mammal and intracellularly produces immunodeficiency retroviral specific peptides for presentation on the cell's MHC class I molecules,

where said peptides are presented in an amount sufficient to stimulate a protective CD8⁺ HIV structural antigen response, and

where said mammal

i. has an immunodeficiency retroviral load of less than 10,000 viral copies per ml of plasma and a CD4⁺ cell count of above 500 cells/ml prior to administration of the recombinant virus, and

ii. has been treated with one or more anti-viral agents, which contributed to a lower viral copy and higher CD4⁺ cell count before treatment

where said peptides comprise immunodeficiency retroviral Gag, Gp120, Nef or Pol peptides.